REMARKS/ARGUMENTS

A petition to extend the period of time for responding to the Office Action by one (1) month is enclosed herewith.

Claims 23 - 45 are pending in this application.

A new independent claim 45 has been added.

In the Office Action, claims 23 – 28 and 30 - 44 stand rejected under 35 U.S.C. 103(a) as being unpatentable over JP 64-052238 to Shinobu in view of U.S. Patent No. 3,892,415 to Takahashi et al. Additionally, in the Office Action, claim 29 stands rejected under 35 U.S.C. 103(a) as being unpatentable over JP 64-052238 to Shinobu in view of U.S. Patent No. 3,892,415 to Takahashi et al as applied to claim 23 and further in view of US Patent No. 6,179,031 to Rack et al.

With respect to the rejection of claims 23 – 44 under 35 U.S.C. 103(a), Applicant requests favorable reconsideration in view of the following comments.

Claim 23 of the present application recites an apparatus for joining together at least two substrates, each of which has an inner hole. The apparatus includes a pin that is adapted to the inner holes of the substrates, wherein the pin is provided with at least two noses that are movable radially relative to the pin. Moreover, the noses have linear outer surfaces upon which edges of the inner holes of the substrates can glide downwardly during movement of the noses toward the pin.

The inventive apparatus advantageously ensures that each of the substrates to be bonded together moves downwardly into the bonding position with the substrate in a centered disposition relative to the pin.

Shinobu discloses a substrate bonding arrangement whereby a first substrate is guided along a guide shaft 11 and is received on a projecting part of a leaf spring 12. A pushing shaft 17 is then lowered and the leaf spring 12 is deflected toward the center of the guide shaft 11, whereupon the lower substrate 1 drops onto a step part of the guide shaft 11. The pushing shaft 17 is then released to move upwardly and an adhesive agent 3 is applied onto the lower substrate 1 in preparation for the adhesive securement of the lower substrate 1 with an upper substrate 2 which is applied downwardly over the guide shaft 11 in the same manner as the lower substrate 1 was applied.

Takahashi et al '415 discloses a record changer having upper claws 95 and lower claws 87 both movably mounted in a spindle 83. As described in column 8, lines 53-67 of Takahashi et al '415, when the shaft 85 of the spindle 83 is moved upwardly, the upper claws 95 are drawn into the spindle 83 in a closed state because the upper claw holder 94 is raised against the resilience of a spring 98, as shown in figure 9 of Takahashi et al '415. Thereafter, the records to be played, which can range from a single record up to six records to be continuously played, are then lowered along the spindle 83 to be supported on the lower claws 87. Thereafter, when one of the records is to be lowered onto the turntable, the lower claws 87 are retracted inwardly and the lowermost record moves downwardly along the remainder of the spindle 83 onto the turntable.

In the Office Action, it is asserted that Shinobu discloses an apparatus for bonding two substrates but notes, however, that Shinobu does not disclose noses having linear outer surfaces the edges of which engage the inner holes of the

substrates during movement of the noses toward the pin. Nonetheless, the Office Action asserts, one of ordinary skill in the art would appreciate providing any mechanism which would allow the substrate to be supported until release and which includes any other surface configuration such as a curved surface or a linear outer surface for the noses to allow any substrate to glide downwardly during movement of the noses. Moreover, the Office Action asserts, such a mechanism is well known and conventional as is shown, for example, by Takahashi et al '415. Thus, the Office Action asserts it would have been obvious to one skilled in the art at the time the invention was made to provide a mechanism with a linear outer surface for the noses as disclosed by Takahashi et al '415 in the apparatus of Shinobu to thereby provide a simple and inexpensive mechanism to easily position the substrates properly without damaging the substrates.

Applicants respectfully submit that the present invention is neither taught nor disclosed by Shinobu or Takahashi et al '415 alone or in combination. As noted, Shinobu provides a deflectable leaf screen 12 that is deflected by the operation of a pushing mechanism 17. Thus, Shinobu does not teach any mechanism by which the movement of a substrate downwardly along a pin or a shaft effects the inward movement of a radially moveable element such as, for example, a leaf spring, let alone teaching a radially moveable nose, such as recited in claim 23 of the present application, that is moved radially inwardly as the inner hole of the substrate glides therealong.

With respect to the Takahashi et al '415 record changer, it can be clearly seen

that Takahashi et al '415 does not contemplate or even hint at the desirability of an inwardly moveable nose-type structure that moves inwardly as an inner hole item such as, for example, a record, is moved downwardly along a shaft. Instead, in Takahashi et al '415, the upper claws 95 are moved inwardly by means of the upper claw holder 94 before the records are even moved past the location of the upper claws 95. Thus, Takahashi et al '415 in fact does not teach or disclose any arrangement in which the mechanism that inwardly moves a nose-type structure is the downward movement of the inner hole item. Accordingly, since neither Shinobu nor Takahashi et al '415 disclose the mechanism recited in claim 23 of the present application, neither reference provides any motivation for one of skill in the art to selectively combine the respective structures disclosed in Shinobu and Takahashi et al '415 with one another.

Moreover, even if there were some motivation for one of skill in the art to combine Shinobu and Takahashi et al '415 with one another in the manner suggested in the Office Action, which Applicants submit there is not, neither Shinobu nor Takahashi et al '415 provide any guidance to one of skill in the art as to how the respective different structures of the two references can be combined with one another. Since Shinobu already has its own mechanism - namely, the pushing shaft 17 and the leaf spring 12 arrangement - for permitting the downward movement of a substrate past a pre-determined location on a shaft, and since Takahashi et al '415 has its own arrangement - namely, the upper claw holder 94 for moving the upper claws 95 inwardly into the spindle 83 to permit the passage therepast of a stack of records, there would be no motivation for one of skill in the art to selectively substitute one of these mechanisms

for the other of these mechanisms.

Furthermore, even if one of skill in the art were provided with such motivation to substitute one mechanism for the other, the resulting combination would still not operate in the same manner as the substrate arrangement recited in claim 23 of the present application. For example, the substitution of the mechanism of Takahashi et al '415 into the arrangement of Shinobu, as suggested by the Office Action, would still not result in a structure in which resilient nose-type projections are moved inwardly by means of the passage of the substrate therepast, as is recited in claim 23 of the present application. Additionally, it would still be of no avail to substitute the mechanism of either Shinobu or Takahashi et al '415 into the other's respective arrangement, as neither of these mechanisms provide the advantage of the inventive apparatus recited in claim 23 of the present application – namely, neither of these prior art mechanisms ensures the centered disposition of a substrate as the substrate is moved downwardly along the length of a pin or a shaft.

Accordingly, it is submitted that the substrate arrangement recited in claim 23 of the present application is neither taught nor disclosed by Shinobu or Takahashi et al '415, alone or in combination with one another. Additionally, it is submitted that the other cited references do not overcome the deficiencies of Shinobu or Takahashi et al '415 and that claims 24 - 44 ultimately depending from claim 23 of the present application are allowable for at least the reasons that claim 23 is allowable.

Applicants respectfully submit that claims 23 - 44 are patentable over the cited references and request withdrawal of the rejections under 35 U.S.C. 102 and 103 and

reconsideration of the application for the reasons set forth above.

Additionally, Applicants submit that new independent claim 45 patentably defines over the prior art of record. New independent claim 45 recites an apparatus for joining together at least two substrates, each of which has an inner hole. The apparatus includes a pin having an outer diameter less than the inner holes of the substrates such that each of the substrates can freely pass over the pin upon insertion of the substrate onto the pin. Also, the apparatus recited in new independent claim 45 includes at least two noses, each nose being movable relative to the pin and having an outer surface for sliding engagement therealong of an inner hole edge location of a respective one of the substrates being inserted over the pin. Each nose yieldably resists the downward sliding movement of the respective engaged inner hole edge location of the respective one substrate as the respective one substrate is being inserted over the pin, wherein the noses move radially inwardly relative to the pin during the downward sliding movement of the respective one substrate along the noses. Moreover, the yielding resistance of each of the noses relative to the other of the noses is such that the respective one substrate remains substantially centered on the pin as the respective one substrate slides along the noses and the axial lower limits of the outer surfaces of the noses are axially above a lower extent of the pin having a length sufficient for the respective one of the substrates to move downwardly beyond the noses into a position on top of an already fully inserted substrate disposed therebelow. The apparatus recited in new independent claim 45 additionally includes means for biasing the noses radially outwardly from the pin such that the noses immediately engage the respective

one substrate as the one respective substrate moves downwardly along the pin. It can be appreciated that none of the prior art of record teaches or discloses the apparatus recited in new claim 45.

In light of the foregoing arguments in support of patentability, Applicants respectfully submit that this application now stands in condition for allowance. Action to this end is courteously solicited.

Should the Examiner have any further comments or suggestions, the undersigned would very much welcome a telephone call in order to discuss appropriate claim language that will place the application into condition for allowance.

Respectfully Submitted,

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